

July 21, 2016

Mr. Jerald G. Head
Senior Vice President, Regulatory Affairs
GE Hitachi Nuclear Energy
3901 Castle Hayne Road MC A-18
Wilmington, NC 28401

SUBJECT: PEAK CLADDING TEMPERATURE FOR GE HITACHI NUCLEAR ENERGY
ADVANCED BOILING WATER REACTOR DESIGN CERTIFICATION RULE
RENEWAL APPLICATION

Dear Mr. Head:

By letter dated December 7, 2010, GE Hitachi Nuclear Energy submitted for approval an application to renew the U.S. Advanced Boiling Water Reactor (ABWR) design certification rule (DCR) pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on whether to grant the renewal application.

By letters dated February 13, 2012, December 19, 2012, December 13, 2013, December 19, 2014, and December 3, 2015, you reported emergency core cooling system evaluation model changes or errors that increased the peak cladding temperature (PCT) of the ABWR standard plant design that was certified by the rule in 10 CFR Part 52, Appendix A. These reports were made pursuant to 10 CFR 50.46, and the reported changes or errors qualify as significant under 10 CFR 50.46(a)(3)(i). Section 50.46(a)(3)(iii) states, in part, that if the change or error is significant, the applicant for the design certification (including an applicant after the Commission has adopted a final design certification rule) shall provide the required report within 30 days and include with the report a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with 10 CFR 50.46 requirements. Contrary to this requirement, your letters did not contain a schedule for providing a reanalysis or identifying actions to show compliance with 10 CFR 50.46. Also, the 30 day reporting requirement was not met.

Furthermore, on February 19, 2016, you submitted the first revision to your application to renew the ABWR DCR. This revision does not change the PCT consistent with your letters cited above. In accordance with 10 CFR 52.57(a), an application for renewal of a design certification must contain all information necessary to bring up to date the information and data contained in the previous application. Also, to renew the design certification, the NRC must find as required by 10 CFR 52.59(a) that the design complies with the regulations in effect at the time of the original certification. These regulations include 10 CFR 50.46. Therefore, you are requested to provide design control document changes and any supporting information needed to demonstrate compliance with 10 CFR 50.46 requirements or justify why a change is not required within 30 days of the date of this letter.

J. Head

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Should you have any questions or comments concerning this matter, please contact Adrian Muñiz at (301) 415-4093, or via e-mail at Adrian.Muniz@nrc.gov.

Sincerely,

/RA/

Francis M. Akstulewicz, Director
Division of New Reactor Licensing
Office of New Reactors

Docket No.: 052-45

cc: See next page

Should you have any questions or comments concerning this matter, please contact Adrian Muñiz at (301) 415-4093, or via e-mail at Adrian.Muniz@nrc.gov.

Sincerely,

/RA/

Francis M. Akstulewicz, Director
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